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WHEN QUALITY IS AN ISSUE, THE CHOICE IS HAEFELY EMC



FCC PART 68

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SURGE PLATFORM[®] TEST SYSTEM SOLUTION

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HAEFELY ^{EMC}
TECHNOLOGY

FCC PART 68 SYSTEM

GENERAL

FCC part 68 relates to the testing of Terminal Equipment connected at both residential and commercial premises. The demarcation point between telephone company network and subscriber network determines if FCC part 68 should be used or if another standard may be more appropriate. It applies equally to voice-band analog, Public Switched Digital Services and ISDN Basic Rate Access or Primary Rate Access systems. Testing is required on both the telecom port and any power ports. Section 68.302 refers specifically to surge impulse tests. Terminal equipment can be telephones, fax machines, modems, voice mail systems, etc. Testing is required with equipment in its normal functioning state. Surges must be applied to the Tip and Ring connections in both metallic and Longitudinal modes, and differentially to power line phases.

FEATURES

- Full hybrid waveforms according to the latest FCC part 68 standard
- Telecom line surges type A and B
- Power line surges
- Integrated Tip and Ring coupling for 2 and 4 wire telecom systems
- Integrated automatic AC & DC power coupler
- Reliable semiconductor discharge switch
- Integrated output voltage and current monitor
- Expandable to three phase system
- Flexible test parameters
- State of the art PC based operating terminal
- 4 wire telecom coupling network output adaptors to RJ11, RJ12, RJ45, etc.

HYBRID IMPULSES

Four hybrid impulses for use in Telecom and power lines applications.

Wave shapes

- 10/160 μ s
- 10/560 μ s
- 9/720 μ s
- 2/10 μ s

Coupling

- Single connect system speeds the test process. Automatic coupling units for single, three phase power lines and 4 wire telecom applications, enable routing of impulses to multiple EUT ports without changing test configuration.

BENEFITS

- Ease of use
- Plug and play technology
- Totally reproducible test results
- Easy verification of impulse
- A modular expandable system that grows with your application needs
- Faster testing
- Shorter test time
- Cost effective investment
- No reconfiguration during testing "single connect testing"
- Integrated personnel & test object safety
- Automatic test report generation
- Investment can be shared between compliance and development departments

A complete FCC part 68
Surge Test System



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MODULE SPECIFICATION

Application specific modules have been designed for the Surge Platform System to meet FCC part 68 requirements. The (PIM 800) Hybrid module houses the three (10/160, 10/560, 9/720) Type A and B telephone line impulse circuits. Internal circuitry routes the programmed impulse to the (PCD 800) 2 and 4 wire Telecom coupler. All coupling path requirements for FCC part 68 are automatically switched under control of Surge Platform system software. PIM 810 Hybrid module contains power line surge (2/10). It's output is connected to the PCD 100 or PCD 300 Coupling / Decoupling Network which is under full control of the Surge Platform system software. This configuration enables an EUT to be fully tested without having to change cables or to manually select coupling modes. A considerable saving in time can be accomplished.

TECHNICAL SPECIFICATION

Telephone Line Surge Type A and B

PIM 800	Voltage		Current	
	Metallic	800 V	10 / 560 μ s	100 A
Longitudinal	1500 V	10 / 160 μ s	200 A	10 / 160 μ s
Metallic	1500 V	9 / 720 μ s	37.5 A	5 / 320 μ s
Longitudinal	1500 V	9 / 720 μ s	37.5 A	5 / 320 μ s

2 and 4 wire Telecom Coupler

PCD 800	coupling elements			
	Direct connection	Resistors	Coupling 1	Coupling 2
-	25 Ω	0.1 μ F*	90 V Gas arrestor*	

*Can be easily changed to user specific coupling elements

Power Line Surges

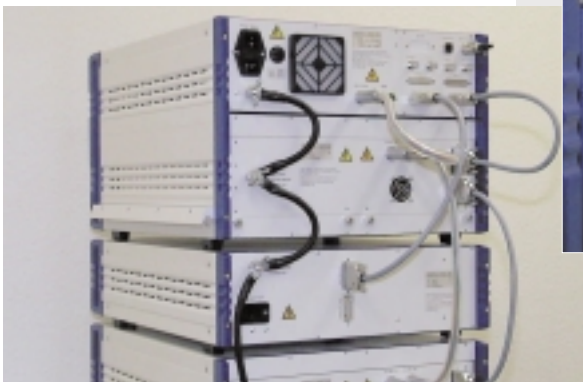
PIM 810	Voltage		Current	
		2500 V	2 / 10 μ s	1000 A

Power Line Coupler Single Phase

PCD 100	AC	DC
	264 V / 16 A	110 V / 16 A

Power Line Coupler Three Phase

PCD 300	AC	DC
	690 V / 32 A	110 V / 32 A



PREPARED TO MEET THE FUTURE

ABOUT US

Founded in 1903 by Emile Haefely, the present day company, Haefely Test AG, has its headquarters in Basel Switzerland. An ISO 9001 accredited quality supplier, Haefely manufacture impulse generators and high voltage measurement systems at two locations in North West Switzerland - Basel and Dietikon.

EMC at Haefely has a 25 year history which started with power relay test systems which use a hybrid of high voltage and EMC technology. From this point on, the EMC unit within Haefely has developed a complete range of test equipment to meet today's requirements. The story does not end here, the Business Unit EMC, as it is now known, has a highly qualified team of engineering professionals developing ideas which will become the next generation of EMC equipment.

Our customers are important to us and to ensure satisfaction, Haefely have calibration and maintenance services.

Quality is not an issue at Haefely it is central to our policy of providing top quality test equipment that is the best in its class.

"Ready to meet the future with HAEFELY EMC"



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